

PHOENIX INDUSTRIES INC -- HYDROCHLORIC ACID, 30-40% -- 6810-00-823-8010

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Product Identification
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Product ID:HYDROCHLORIC ACID, 30-40%

MSDS Date:05/31/2000

FSC:6810

NIIN:00-823-8010

Status Code:A

MSDS Number: CLBFB

=== Responsible Party ===

Company Name:PHOENIX INDUSTRIES INC

Address:1519 CHAMBERLAYNE PARKWAY

City:RICHMOND

State:VA

ZIP:23222

Country:US

Info Phone Num:804-264-5183

Emergen

cy Phone Num:(800)264-5183

Chemtrec Ind/Phone:(800)424-9300

CAGE:0YED2

=== Contractor Identification ===

Company Name:PHOENIX INDUSTRIES INC

Address:1519 CHAMBERLAYNE PARKWAY

Box:City:RICHMOND

State:VA

ZIP:23222

Country:US

Phone:804-264-5183/FAX: 264-5535

Contract Num:SP0450-01-M-D923

CAGE:0YED2

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Composition/Information on Ingredients
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Ingred Name:HYDROGEN CHLORIDE

CAS:7647-01-0

RTECS #:MW4025000

Minumum % Wt:30.

Maxumum % Wt:40.

Other REC Limits:5 PPM CEILING

OSHA

PEL:C7 MG/M3;C5 PPM
ACGIH STEL:C7.5 MG/M3;C5 PPM
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:WATER
CAS:7732-18-5
RTECS #:ZC0110000
Minumum % Wt:60.
Maxumum % Wt:70.

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===== Hazards Identification =====

LD50 LC50 Mixture:LD50 ORAL RABBIT = 900 MG/KG CONC. HCL
Reports of Carcinogenicity:NTP:NO IARC:NO
Health Hazards Acute and Chronic:INHALATION: CORROSIVE! VAPORS CAN CAUSE COUGHING, CHOKING, INFLAMMATION OF THE NOSE, THROAT & UPPER RESPIRATOR Y TRACT & IN SEVERE CASES, PULMONARY EDEMA, CIRCULATORY FAILURE & DEATH. INGESTION: CORROS IVE! SWALLOWING CAN CAUSE IMMEDIATE PAIN & BURNS OF THE THROAT, ESOPHAGUS & GI TRACT. MAY CAUSE NAUSEA, VOMITING & DIARRHEA. SWALLOWING MAY BE FATAL. SKIN: CORROSIVE! CAN CAUSE REDNESS, PAIN & SEVERE SKIN BURNS. CONC SOLUTIONS CAUSE DEEP ULCERS & DISCOLOR SKIN. EYE: CORROSIVE! VAPORS ARE IRRITATING & MAY CAUSE DAMAGE TO THE EYES. CONTACT MAY CAUSE SEVERE BURNS & PERMANENT EYE D AMAGE. CHRONIC:EROSI ON OF TEETH.
Effects of Overexposure:INHALATION: CORROSIVE! VAPORS CAN CAUSE COUGHING, CHOKING, INFLAMMATION OF THE NOSE, THROAT & UPPER RESPIRATORY TRACT & IN SEVERE CASES, PULMONARY EDEMA, CIRCULATORY FAILURE & DEATH. INGESTION: CORROS IVE! SWALLOWING CAN BE FATAL & CAUSE IMMEDIATE PAIN & BURNS OF THE THROAT, ESOPHAGUS & GASTROINTESTINAL TRACT. MAY CAUSE NAUSEA, VOMITING & DIARRHEA. SKIN: CORROSIVE! CAN CAUSE REDNESS, PAIN & SEVERE SKIN BURNS. CONC SOLUTIONS CAUSE DEEP ULCERS & DISCOLOR SKIN. EYE: CORROSIVE! VAPORS ARE IRRITATING & MAY CAUSE DAMAGE TO THE EYES. CONTACT MAY CAUSE SEVERE BURNS & PERMANENT EYE DAMAGE.
Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN DISORDERS OR EYE DISEASE MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS SUBSTANCE.

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===== First Aid Measures =====

First Aid:INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRA

TION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET MEDICAL HELP IMMEDIATELY. INGESTION: DO NOT INDUCE VOMITING! GIVE LARGE QUANTITIES OF WATER/MILK IF AVAILABLE. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL HELP. SKIN: IMMEDIATELY FLUSH W/ PLENTY OF WATER FOR AT LEAST 15 MINS. WHILE REMOVING CONTAMINATED CLOTHING & SHOES. WASH CLOTHING & CLEAN SHOES BEFORE REUSE. GET MEDICAL HELP IMMEDIATELY. EYE: IMMEDIATELY FLUSH W/ PLENTY OF WATER FOR AT LEAST 15 MINS., LIFTING EYELIDS OCCASIONALLY. GET MEDICAL HELP IMMEDIATELY.

===== Fire Fighting Measures =====

Extinguishing Media:IF INVOLVED IN A FIRE, USE WATER SPRAY. NEUTRALIZE WITH SODA ASH OR SLAKED LIME. EXTREME HEAT OR CONTACT WITH METALS CAN RELEASE FLAMMABLE HYDROGEN GAS.

Fire Fighting Procedures:WEAR FULL PROTECTIVE CLOTHING & NIOSH-APPROVED SCBA W/ FULL FACEPIECE OPERATED IN THE PRESSURE DEMAND OR OTHER PRESSURE MODE. STRUCTURAL FI

REFIGHTER'S PROTECTIVE CLOTHING IS INEFFECTIVE FOR FIRES INVOLVING HYDROCHLORIC ACID. STAY AWAY FROM ENDS OF TANKS. COOL TANKS W/ WATER SPRAY UNTIL AFTER FIRE IS OUT.

Unusual Fire/Explosion Hazard:NOT CONSIDERED TO BE AN EXPLOSION HAZARD.

===== Accidental Release Measures =====

Spill Release Procedures:VENTILATE AREA. WEAR PERSONAL PROTECTIVE EQUIPMENT. ISOLATE HAZARD AREA. KEEP UNPROTECTED PERSONNEL FROM ENTERING. CONTAIN & RECOVER LIQUID WHEN POSSIBLE. NEUTRALIZE W/

ALKALINE MATERIAL (SODA ASH, LIME), THEN ABSORB W/ INERT MATERIAL (E.G., VERMICULITE, DRY SAND, EARTH) & PLACE IN A CHEMICAL WASTE CONTAINER. DO NOT USE COMBUSTIBLE MATERIALS, SUCH AS SAW. DO NOT FLUSH TO SEWER.

Neutralizing Agent:NEUTRALIZE WITH ALKALINE MATERIAL (SODA ASH, LIME)

===== Handling and Storage =====

Handling and Storage Precautions:STORE IN A COOL, DRY, VENTILATED STORAGE AREA WITH ACID RESISTANT FLOORS

AND GOOD VENTILATION.

PROTECT FROM PHYSICAL DAMAGE. KEEP OUT OF DIRECT SUNLIGHT & AWAY FROM HEAT, WATER, INCOMPATIBLE MATERIALS . DO NOT WASH OUT CONTAINER AND USE IT FOR OTHER PURPOSES.

Other Precautions:WHEN DILUTING, THE ACID SHOULD ALWAYS BE ADDED SLOWLY TO WATER & IN SMALL AMOUNTS. NEVER USE HOT WATER & NEVER ADD WATER TO THE ACID. WATER ADDED TO ACID CAN CAUSE UNCONTROLLED BOILING & SPLASHING. WH EN OPENING METAL CONTAINERS, USE NON-SPARKING TOOLS BECAUSE OF POS
SIBILITY OF HYDROGEN GAS BEING PRE SENT.

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===== Exposure Controls/Personal Protection =====

Respiratory Protection:(NIOSH APPROVED): IF THE EXPOSURE LIMIT IS EXCEEDED, A FULL FACEPIECE RESPIRATOR W/ AN ACID GAS CARTRIDGE CAN BE WORN UP TO 50 TIMES THE EXPOSURE LIMIT OR THE MAXIMUM USE PERMITTED BY THE APPROPRIATE REGULATORY AGENCY OR RESPIRATOR SUPPLIER, WHICHEVER IS LESSER.*** SEE SUPPLEMENTAL DATA***

Ventilation:LOCAL &/OR GENERAL EXHAUST IS RECOMMENDED TO K
EEP EMPLOYEE

EXPOSURE BELOW THE AIRBORNE EXPOSURE LIMITS. LOCAL EXHAUST VENTILATION IS PREFERRED.

Protective Gloves:USE RUBBER OR NEOPRENE GLOVES

Eye Protection:USE CHEMICAL SAFETY GOGGLES &/OR A FULL FACE SHIELD WHERE SPLASHING IS POSSIBLE

Other Protective Equipment:USE ADDITIONAL PROTECTION INCLUDING IMPERVIOUS BOOTS, APRON, COVERALLS, AS NEEDED IN AREAS OF UNUSUAL EXPOSURE TO PREVENT SKIN CONTACT. HAVE EYE WASH FOUNTAIN AND QUICK-DRENCH FACILITIES IN WORK AREA.

Work Hy

gienic Practices:USE IN A WELL VENTILATED AREA. AVOID CONTACT.

Supplemental Safety and Health

IN EMERGENCIES OR INSTANCES WHERE THE EXPOSURE LEVELS ARE NOT KNOWN, USE A POSITIVE-PRESSURE, AIR SUPPLIED RESPIRATOR. WARNING: AIR PURIFYING RESPIRATORS DO NOT PROTECT WORKERS IN OXYGEN-DEFICIENT ATM OSPHERES.

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===== Physical/Chemical Properties =====

HCC:C1

Boiling Pt:=53.C, 127.4F

B.P. Text:AZETROPE (20.2%) BOILS

Melt/Freeze Pt:=-74.C, -101.2F

Vapor Pres:190 @

25C(77F)

Spec Gravity:1.16

pH:0.1(1.0N),

Solubility in Water:INFINITE IN WATER

Appearance and Odor:COLORLESS, FUMING LIQUID; PUNGENT ODOR OF HYDROGEN CHLORIDE

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

A STRONG MINERAL ACID, CONCENTRATED HYDROCHLORIC ACID IS INCOMPATIBLE W/ & HIGHLY REACTIVE W/ STRONG BASES, METALS, METAL OXIDES, HYDROXIDES, AMINES & OTHER ALKALINE MATERIALS. INCOMPATIBLE WITH CYANIDES, SULFIDE

S, SULFITES

Stability Condition to Avoid:HEAT, DIRECT SUNLIGHT. CONTAINERS MAY BURST WHEN HEATED.

Hazardous Decomposition Products:WHEN HEATED TO DECOMPOSITION, EMITS TOXIC HCL FUMES & WILL REACT WITH WATER OR STEAM TO PRODUCE HEAT & TOXIC & CORROSIVE FUMES. THERMAL OXIDATIVE DECOMPOSITION PRODUCES TOXIC CHLORINE FUMES & H2 GAS.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Toxicological Information =====

Toxicological Information:INHALT

ION RAT LC50= 3124 PPM/1 H; ORAL RAT

LD50 = 900 MG/KG (CONC. HYDROCHLORIC ACID); INVESTIGATED AS A TUMORIGEN, MUTAGEN, REPRODUCTIVE EFFECTOR: NOT LISTED AS A KNOWN OR AN ANTICIPATED CARCINOGEN B Y NTP AND IARC.

===== Ecological Information =====

Ecological:ENVIRONMENTAL FATE: WHEN RELAEASE INTO THE SOIL, THIS MATERIAL IS NOT EXPECTED TO BIODEGRADE, AND THIS MATERIAL MAY LEACH INTO GROUNDWATER. ENVIRONMENTAL TOXICITY: THIS MATERIAL IS EXPECT ED TO BE TOXI C TO AQUATIC LIFE.

===== Disposal Considerations =====

Waste Disposal Methods:WHATEVER CANNOT BE SAVED FOR RECOVERY/RECYCLING SHOULD BE HANDLED AS HAZARDOUS & SENT TO A RCRA APPROVED WASTE FACILITY. PROCESSING, USE OR CONTAMINATION MAY CHANGE THE WASTE MGMT OPTIONS. STATE & LOC AL DISPOSAL REGULATIONS DIFFER FROM FEDERAL DISPOSAL REGULATIONS. DISPOSE OF CONTAINER & UNUSED CONT ENTS I/A/W FEDERAL, STATE & LOCAL REGS.

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===== MSDS Transport Information =====

Transport Information:PSN: HYDROCHLORIC ACID, 8, UN1789, II.

===== Regulatory Information =====

SARA Title III Information:SARA 302: HYDROGEN CHLORIDE: RQ = 5000 LBS;
TPQ = 500 LBS; LISTED = YES.

===== Other Information =====

Disclaimer (provided with this information by the compiling agencies):

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Department

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